A Computer Assisted Psychiatric Nursing Review: Modeling Nursing/Computer Analyst Collaboration

Karen DuBois, RNC, MSN, Nursing Information Systems Consultant/Computer Assisted Instruction Specialist, Penzance Professional Nursing and Health Career Development Center at The Presbyterian Hospital in the City of New York

Jeffrey Zucker, M.A., Programmer Analyst, Department of Nursing Education and Standards at The Presbyterian Hospital in the City of New York

Darlene Galashaw, RNC, MSN, Nursing Care Clinician at The Presbyterian Hospital in the City of New York

Transforming information in a changing health care environment is directly related to the collaboration of health care professionals and programmer analysts. Separate languages are spoken in the health care field and computer technology. These languages must be merged in an effort to translate health care content into appropriate electronic formats.

The process of collaboration between nurse content experts and a programmer analyst led to the development of a software program that has multiple uses for nursing. The final product was originally intended as a review course for psychiatric nurses taking the ANA certification exam. Many discussions with the programmer analyst enabled the nurse content experts to expand the objectives of this program to include clinical validation of psychiatric nursing skills, continuing education and/or orientation purposes.

The content experts were involved in teaching psychiatric nurses a two day lecture series in preparation for the ANA psychiatric mental health certification exam. In addition they oriented new nurses to the clinical setting and provided continuing education. The repetition of content in these areas prompted them to consult with a programmer analyst regarding the development of a computer assisted instruction course.

The content experts and programmer together developed a series of requirements for the program based on the computer platform, the targeted audience and the nature of the content. Since the materials were aimed at both in-hospital and home use, the program needed to be available in stand-alone and in networked environments. Further, the lack of graphics capabilities at many nursing computer stations mandated a text-only program. The targeted audience included nurses with little or no computer experience so the program needed to be simple, have easily available help information, and allow users to exit and return to the program at will. In addition, the team thought that the software needed to be flexible enough to adapt new information as it became available.

Taking these requirements into consideration, the programmer developed an authoring tool using C++ language. The tool does not require large amounts of disk space or memory and runs on any DOS computer, either networked or stand-alone. Aimed at the nurse with little computer experience, the software requires the user to be familiar with only six keys on the keyboard; and presents keystroke help and a description of the user's current location in the program on every screen. The tool accepts data in ASCII format so that information, questions, and scenarios may be changed and updated by anyone with simple word processing skills.

In addition to these platform and audience questions, the content presented special considerations: the development team perceived a need to have the software contain a representation of the ongoing evolving nature of the relationship between psychiatric nurses and their patients. The special nature of the psychiatric nursing relationship was partially preserved by a series of patient scenarios. Each topic area focuses on a specific (although fictional) patient. Users are presented with a scenario about the patient, asked some questions, then presented with further details in another scenario that includes changes in the patient status. Some topic areas include as many as six or more scenario changes so users are able to answer questions about several stages in the patient's progress. At any time the user may review the scenarios to use all of the information to answer the current question.

0195-4210/94/$5.00